

## ABSTRACTS FROM CURRENT LITERATURE

**Eosinophilic fasciitis, reactive hepatitis and splenomegaly, Jacobs MB : Arch Int Med, 1985; 145 : 162-163.**

Eosinophilic fasciitis is an acute, idiopathic inflammatory disorder manifested often by tender swelling of the extremities after extreme physical exertion. It was first reported by Shulman in 1974. Although visceral involvement is usually absent in this syndrome, pulmonary fibrosis, auto-immune anaemia, thrombocytopenia, Raynaud's phenomenon, Sjogren's disease, oesophageal abnormalities, synovitis, myositis, contractures and carpal tunnel syndrome have been described. The author has described reactive hepatitis and splenomegaly in his 25-year-old patient with eosinophilic fasciitis.

**Bhushan Kumar**

**Large acquired nevocytic nevi induced by the Koebner phenomenon, Soltani K, Pepper MC, Simjee S et al : J Cutan Pathol, 1984; 11 : 296-299.**

Although most acquired nevocytic nevi arise de novo, these may develop at the sites of puncture wounds and following bullous disorders such as erythema multiforme and Lyell's syndrome. This suggests that a Koebner-like phenomenon may initiate their formation. Here, the authors report large nevocytic nevi that developed at the sites of healing of blisters in a patient with epidermolysis bullosa simplex. An isomorphic reaction may have initiated the development of these nevi. Such large acquired nevi should be considered in the differential diagnosis of large and giant congenital nevi which have the potential to evolve into malignant melanoma.

**K Pavithran**

**Eosinophilic ulcers of the tongue, Borroni G, Pericoli R, Gabba P et al : J Cutan Pathol, 1984; 11 : 322-325.**

A case of eosinophilic ulcers of the tongue (EUT) is reported in a 16-year-old woman. She presented with two asymptomatic ulcers on the tip of her tongue. Histopathological study of the ulcer revealed an area of ulceration of the oral mucosa. The epithelium surrounding the lesion was hyperplastic. Floor was infiltrated with lymphocytes, neutrophils and eosinophils. Deeper dermis and even muscle fibres were diffusely infiltrated with eosinophils and other inflammatory cells. The aetiology of EUT is unknown. The presence of eosinophils suggests connective tissue damage or the release of vasoactive substances. Possible role of trauma in the production of lesions also has been suggested. The lesions show tendency for self healing.

**K Pavithran**

**The cutaneous pathology of facial lesions in Cowden's disease, Starink TM and Hausman R : J Cutan Pathol, 1984; 11 : 331-337.**

Multiple trichilemmomas have been regarded as the hallmark of Cowden's disease. It is transmitted as an autosomal dominant trait and has characteristic muco-cutaneous findings and a variety of associated abnormalities. These include breast cancer, lichenoid and verrucous papules on the face, hyperkeratotic and verrucous lesions on the acral parts of extremities and punctate palmo-plantar keratoses. Oral lesions include smooth and keratotic papular lesions, papillomatosis of the lips and oral mucosa and scrotal tongue. A histopathological study of 11 facial lesions from 7 patients with Cowden's disease indicated that most belong to a spectrum

of related follicular malformations. The most distinctive lesions included multiple facial trichilemmomas which were frequently cylindrical, resembling a blown-up hair follicle, but could be lobular. Four of the 5 trichilemmomal lesions were from the centropacial area. Three periauricular lesions showed the pattern of tumour of follicular infundibulum without trichilemmal features. Two lesions were epidermal without a follicular component and resembled digitate warts. No evidence of virus infection was found using an antiserum to papilloma virus.

**K Pavithran**

**The diagnostic value of parakeratosis, Price ML, Holden CA and Mc Donald DM : J Cutan Pathol, 1984; 11 : 249-258.**

Parakeratosis, the retention of pyknotic nuclei in the stratum corneum, occurs in many skin disorders. A variety of parakeratotic patterns exist, the recognition of which may be a useful aid to histopathological diagnosis. Here the authors classified the dermatopathological specimens showing parakeratosis on morphological and topographical criteria. Twelve patterns of parakeratosis have been identified and their association with particular pathological conditions described. Parakeratosis may be 'pointed' as in psoriasis, 'pillared' as in solar keratosis, 'periodic' as in verrucous nevus, 'parcelled' as in pityriasis lichenoides chronica, 'penetrating' as in Kyrle's disease, 'plumed, as in porokeratosis of Mibelli, 'plump type' as in verruca vulgaris, 'punctate' as in Darier's disease, 'perifollicular' as in PRP and 'physiological' as in mucous membranes. 'Pseudoparakeratosis may be caused by bacteria and polymorph debris and paradoxical parakeratosis may occur in lichenoid drug eruption.

**K Pavithran**

**Psoralens and UVA and UVB twice weekly for the treatment of psoriasis, Dietto KM, Momtaz TK, Stern RS et al : Arch Dermatol, 1984; 120 : 1169-1173.**

In the present study, the authors have tried psoralens along with UVA and UVB twice a week, to see its efficacy and compared it with PUVA alone. Thirty one patients, 20 males and 11 females, who had chronic plaque type psoriasis of at least four months duration covering a minimum of 15% of their cutaneous surface were taken up for this study. All patients were treated with twice a week exposures to both UVA and UVB, two hours after ingestion of 0.6 mg/kg of methoxsalen. The UVA and UVB exposures were done either simultaneously or in succession. After 5 to 7 treatments, if clearing was inadequate, the dosage of methoxsalen was increased by 10 mg. The patients were divided into 3 groups : Group A (11 patients) received total body exposure to UVA but one half of the body was exposed to UVB. Group B (10 patients) received total body exposures to UVA and UVB. In group C (10 patients) rapid UVA and UVB dose increments were compared with less aggressive UVA and UVB dose increments.

In the bilateral comparison study, seven of the 11 patients cleared with PUVA with UVB or PUVA alone, but in four cases, the PUVA and UVB treated sides cleared significantly more rapidly. In all the 11 cases of group A, and ten additional patients treated with PUVA and UVB twice weekly, this therapy was very effective in clearing psoriasis. In majority of the patients, non-aggressive therapy was almost equally effective as the aggressive therapy. The authors concluded that treatment with PUVA and UVB twice weekly was more effective than PUVA alone eliciting the additive or synergistic effect of UVA and UVB.

**A K Bajaj**

**Cimetidine blocks testosterone synthesis,** Lardinois CK and Mazzaferri EL, Arch Int Med, 1985; 145 : 920-922.

Endocrine dysfunctions including hyperprolactinemia, gynaecomastia, reduction in sperm count and sexual dysfunction may occur in patients treated with cimetidine. However, serum concentrations of gonadotropins and sex steroids are usually unaffected. High concentration of histamine has been shown in rat hypothalamus and histamine mediated release of prolactin is known to occur. Gynaecomastia occurs in a small number of patients treated with cimetidine. In these patients LH, FSH, prolactin, plasma oestradiol and testosterone levels are in the normal range. It is postulated that gynaecomastia results from the blockage by cimetidine of androgen receptors that normally suppress the growth of breast tissue in man.

In addition to low sperm counts, impotence and decreased libido are reported with cimetidine therapy. Hyperprolactinemia may be the cause of these disorders despite normal testosterone levels. These abnormalities improve after cimetidine is discontinued. Authors found testosterone and high gonadotrophin levels suggesting a primary testicular disorder. A defect in 17- $\beta$ -hydroxysteroid dehydrogenase was proposed to explain the low plasma testosterone concentration which then resulted in gynaecomastia and sexual dysfunction. Withdrawal of the drug resulted in improvement of the symptoms and readministration of the drug resulted in recurrence of the abnormalities.

An antifungal drug ketoconazole with the same imidazole ring in its structure as cimetidine is already known to produce gynaecomastia and reduced plasma testosterone levels in men.

**Fetal hydrocephalus and ear anomalies associated with maternal use of isotretinoin,** Lott IT, Bocian M, Pribram HW et al : J Pediat, 1984; 105 : 597. Obstet Gynecol Survey, 1985; 40 : 302-303.

Case is described of a 16-year-old primigravida who started taking isotretinoin (40 mg/day) within 5 days of the estimated date of conception for her cystic acne. This dosage was continued for the next 15 weeks. An elective caesarean section was done due to enlarged cranial circumference. At birth, the craniofacial ratio of the infant was markedly increased, and the scalp veins were unusually prominent. At 8th month, the ears were low set and dysplastic with small flat and poorly developed helices. Neurological examination revealed psychomotor retardation. Electro encephalogram was markedly asynchronous. There was no family history of hydrocephalus, craniofacial anomalies or other neuromedical illnesses and no known consanguinity.

There are many published reports about isotretinoin as human fetal pathogen. The infants exposed in utero during the first trimester have had frontal bossing of the cranium, hydrocephalus, microphthalmia, malformed ears, cleft palate, deafness, blindness and congenital heart disease. Isotretinoin is chemically related to vitamin A and vitamin A in large doses has been found to be teratogenic to the offspring of rabbits and rats. The teratogenic effect of a vitamin A substance raises many questions about the modern tendency of many people pregnant or non-pregnant to consume extra large vitamin supplies while they are in basic good health.

**Ultrastructural features of metastatic cutaneous carcinoid, Archer CB, Rauch HJ, Allen MH et al : J Cutan Pathol, 1984; 11 : 485-490.**

Malignant carcinoid tumours may metastasise to the skin. Cutaneous manifestations of carcinoid syndrome include flushing of the skin, patchy cyanosis, telangiectasis and pellagra-like skin lesions. Ultra-structural features of cutaneous metastases from a fatal bronchial carcinoid tumour is reported. Fine argyrophil secretory granules were demonstrated in the cytoplasm of the abnormal cells which showed positive labelling with neuron-specific enolase. There were many electron dense membrane bound neuro-secretory granules, 50-300nm in diameter. Other features were interdigitating pseudopod like processes in the cytoplasmic membrane, perinuclear filaments, a well-defined Golgi zone and numerous large mitochondria.

**K Pavithran**

**High melanosome engulfing activity of cutaneous fibroblasts in macular amyloidosis : an electron microscopic study, Ishii M, Terao Y, Asai Y et al : J Cutan Pathol, 1984; 11 : 476-484.**

In primary cutaneous amyloidosis, the detailed morphology of fibroblasts has been examined and it has been reported that the cells produce amyloid. Recently, this hypothesis has been questioned. The current view is that the fibrous components of amyloid are derived from degenerated keratinocytes. The conventional picture of fibroblasts does not conform to the view that they produce amyloid and so these cells were investigated in detail. Six patients with macular amyloidosis were investigated by electron microscopy. Many cells which seemed to be macrophages by light microscopy, proved to be fibroblasts. The digesting action of fibroblasts was well developed and many melanosomes were taken into the cells

making the cell resemble melanophages. The fibroblasts extended long, thin and branched cytoplasmic processes to surround the amyloid mass. The fibroblasts showed endocytotic activity and probable ingestion of amyloid by pinocytosis or phagocytosis. The hypothesis by Hashimoto and Kobayashi states that a degenerated keratinocyte travels from the epidermis to the dermis, where it is digested by histiocytes or fibroblasts. The resulting material accumulates as amyloid. The authors here interpret the results as indicating that a mass of amyloid is removed and at the same time, normal collagen is synthesized and secreted for repairing the degenerated tissue of the disease.

**K Pavithran**

**Localized granuloma annulare is associated with insulin dependent diabetes mellitus, Muhlemann MF and Williams DRR : Brit J Dermatol, 1984; 111 : 325-329.**

The relationship between diabetes and granuloma annulare is less clear-cut and the evidence is conflicting. Most reports provide no evidence of an association between the localized form of GA and either insulin-dependent diabetes or non-insulin dependent diabetes. The authors examined retrospectively 557 patients with GA, to analyse the prevalence of diabetes mellitus at the time of presentation and follow up. They used age-matched population data from 2 sources for interpretation of the results. A definite association was confirmed between GA and insulin-dependent diabetes with 16 observed cases compared with 0.9 expected, and in all but one case, diabetes was associated with the localized form of GA. Two further cases developed insulin-dependent diabetes within 5 years of presentation with GA.

**K Pavithran**

**Cutaneous manifestations of Gaucher disease, Goldblatt J and Beighton P : Brit J Dermatol, 1984; 111 : 331-334.**

Gaucher disease is an inherited disorder characterized by deficiency of the lysosomal hydrolase, acid-beta-glucosidase. The most common form is type I, chronic, adult or non-neuronopathic Gaucher disease. The authors reviewed the cutaneous manifestations of this disorder in 50 patients. Twenty five (50%) patients had diffuse brown or yellow-brown

hyperpigmentation. Twenty (40%) of the patients had the phenomenon of easy tanning and stated that they became deeply pigmented even in winter after minimal exposure to the sun. Fifteen patients had non-specific brown macules which tended to be flitting and unstable. The secondary effects of Gaucher disease in the liver and bone marrow which lead to skin changes, included purpura, ecchymoses, pallor, jaundice and spider naevi.

**K Pavithran**